

REMARKS

Claims 1-3, 6-19, and 27-43 were pending when the Office Action was mailed. Applicants herein amend claims 1, 3, 9, 13, 16, 17, 28, 35, 37, 38, and 41-43, cancel claim 19, and present new claims 44 and 45. Accordingly, claims 1-3, 6-18, and 27-45 are currently pending.

Applicants would like to thank the Examiner for indicating that claims 42 and 43 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants herein amend claim 42 to address a typographical error.

The Office Action rejects claims 1-3, 7-19, and 27-41 under 35 U.S.C. § 103(a) over Riconda and Basson and rejects claim 6 under 35 U.S.C. § 103(a) over Riconda, Basson, and Claus. Applicants respectfully traverse these rejections. Nevertheless, applicants herein amend the claims to further clarify the subject matter for which protection is sought.

Each of applicants' independent claims now includes an adjustment to a rate (e.g., angular velocity, pan rate) of a line-of-sight controller. Claim 1 now recites "calculating an angular velocity for the line-of-sight controller based on the inter-frame stabilization adjustment, and setting the angular velocity of the line-of-sight controller to the calculated angular velocity." Claim 13 now recites "calculating a pan rate for the line-of-sight controller based at least in part on the determined difference, and setting the pan rate of the line-of-sight controller to the calculated pan rate." Claim 27 recites "a new line-of-sight adjustment rate derived from the change in location of an object within the images." Claim 35 now recites "calculating a rate of rotation for the line-of-sight controller based on the inter-frame stabilization adjustments, and setting the rate of rotation of the line-of-sight controller to the calculated rate of rotation." Claim 41 now recites "adjusting a scan rate of the line-of-sight controller based on the scan angle; and adjusting a tilt rate of the line-of-sight controller based on the tilt angle."

The Office Action relies on Riconda at ¶¶ [0130]-[0136] and Figures 18A and 18B as disclosing an adjustment to a rate of a line-of-sight controller. Applicants respectfully disagree. The relied-upon portions of Riconda describe techniques for adjusting a remote controlled camera mounting to track environmental features. Using one technique, Riconda calculates offsets between captured images, converts the offsets to "angular offsets" and uses the angular offsets to "affect the compensatory adjustments that will keep the item of interest roughly centered in the camera's field of view." (Riconda, ¶¶ [0130]-[0134].) Using another technique, Riconda computes the change in relative position between the camera and the item of interest and converts this change in position to "angular offsets" used to "affect the compensatory adjustments that will keep the item of interest roughly centered in the camera's field of view." (Riconda, ¶¶ [0135]-[0136].) Riconda simply determines an adjustment for rotating the robotic camera mounting and rotates the camera mounting to a new position based on the determined adjustment.

Riconda provides no indication that the "angular offsets" are in any way used to adjust a rate of a camera mounting. Instead, the angular offsets are relative angles for adjusting a robotic camera mounting to a fixed direction or orientation from a current direction or orientation. For example, an angular offset may indicate that the camera mounting needs to be rotated 10 degrees counterclockwise, 5 degrees clockwise, etc. Riconda uses this adjustment to re-position the camera mounting. Riconda, however, does not apply these adjustments to a rate of rotation of the camera mounting. While Riconda's adjustment may be based on the speed of a moving target or the camera itself, the adjustment is not applied to a rate of the camera mounting.

In contrast, applicants' claims recite an adjustment to a rate of a line-of-sight controller. For example, a line-of-sight controller may have a current scan rate of 5 radians per second in order to track a moving object. Applicants' claimed techniques may determine that rotating the line-of-sight controller at the current scan rate is too fast and calculate an adjustment to decrease the scan rate. Thus, rather than merely calculating a new position to point the line-of-sight controller, like Riconda, applicants'

claimed technology determines an adjustment to a rate of rotation of the line-of-sight controller and uses this adjustment to adjust (i.e. speed up or slow down) the rate of rotation. Applicants are unable to find any portion of Riconda that describes or suggests any adjustment to a rate of a line-of-sight controller as the claims recite. Rather, Riconda determines adjustments to the direction or orientation of a camera mounting and re-points the camera mounting accordingly. Basson and Claus do not cure these deficiencies. Accordingly, claims 1, 13, 27, 35, and 41 are patentable over the applied references, as are their dependent claims 2, 3, 6-12, 14-18, 28-34, 36-40, and 42-45. Applicants respectfully request that the Examiner reconsider and withdraw the rejections of these claims.

In view of the above amendment, applicants believe the pending application is in condition for allowance and respectfully request reconsideration and a prompt Notice of Allowance.

Please charge any deficiency in fees or credit any overpayment to our Deposit Account No. 50-0665, under Order No. 367618016US1 from which the undersigned is authorized to draw.

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Respectfully submitted,

By  _____
Maurice J. Pirio

Registration No.: 33,273
PERKINS COIE LLP
P.O. Box 1247
Seattle, Washington 98111-1247
(206) 359-8548
(206) 359-9000 (Fax)
Attorney for Applicant